

addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO:2;

(c) a protein having the amino acid sequence composed of 231 amino acids represented by the 1st to 231st amino acids of SEQ ID NO:4;

D) (b) a protein having an amino acid sequence derived from the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO: 4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO:4;

(e) a protein having the amino acid sequence composed of 33 amino acids represented by the -33rd to -1st amino acids of SEQ ID NO:4;

(f) a protein having an amino acid sequence derived from the amino acid sequence represented by the -33rd to -1st amino acids of SEQ ID NO: 4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -33rd to -1st amino acids of SEQ ID NO:4;

(g) a protein having the amino acid sequence of 264 amino acids represented by the -33rd to +231st amino acids of SEQ ID NO:4;

(h) a protein having an amino acid sequence derived from the amino acid sequence represented by the -33rd to +231st amino acids of SEQ ID NO:4 by deletion, substitution or addition of one to several amino acids and having the same property as that of the protein having the amino acid sequence represented by the -33rd to +231st amino acids of SEQ ID NO:4; and

(i) a modified derivative or fragment of these proteins (a) to (h).

36. (New) A nucleotide sequence selected from the group consisting of:

(aa) a nucleotide sequence represented by the 110th to 802nd bases of SEQ ID NO: 1;

(bb) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO:2;

(cc) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (aa) or (bb) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO: 2;

(dd) a nucleotide sequence represented by the 132nd to 824th bases of SEQ ID NO:3;

(ee) a nucleotide sequence encoding the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO:4;

(ff) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (dd) or (ee) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the 1st to 231st amino acids of SEQ ID NO:4;

D' (gg) a nucleotide sequence represented by the 33rd to 131st bases of SEQ ID NO:3;

(hh) a nucleotide sequence encoding the amino acid sequence represented by the -33rd to -1st amino acids of SEQ ID NO:4;

(ii) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (gg) or (hh) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -33rd to -1st amino acids of SEQ ID NO:4; or a fragment thereof;

(jj) a nucleotide sequence represented by the 33rd to 824th bases of SEQ ID NO:3;

(kk) a nucleotide sequence encoding the amino acid sequence represented by the -33rd to +231st amino acids of SEQ ID NO:4;

(ll) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (jj) or (kk) under stringent conditions and encoding a protein having the same property as that of the protein having the amino acid sequence represented by the -33rd to +231st amino acids of SEQ ID NO:4;

① (mm) a nucleotide sequence represented by SEQ ID NO:1;

(nn) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (mm) under stringent conditions and encoding a protein having the same property as that of the protein encoded by the nucleotide sequence represented by SEQ ID NO:1;

(oo) a nucleotide sequence represented by SEQ ID NO:3;

(qq) a nucleotide sequence hybridizable with a nucleotide sequence which is complementary to the above nucleotide sequence (oo) under stringent conditions and encoding a protein having the same property as that of the

protein encoded by the nucleotide sequence represented by SEQ ID NO:3; and

(rr) a fragment of these nucleotide sequences (aa) to (qq).

37. (New) The process according to claim 14, wherein the cells are *E. coli* cells, animal cells or insect cells.

38. (New) The method according to claim 24, wherein the specimen is a body fluid.

39. (New) The method according to claim 25, wherein the specimen is a body fluid.

40. (New) A method for screening for an inhibitor of serine protease comprising comparing the enzyme activity of the protein according to claim 35 upon bringing the protein into contact with a candidate compound with the enzyme activity of the protein without contact with the candidate compound.

41. (New) A pharmaceutical composition comprising the protein according to claim 35.

42. (New) A method for detecting a diagnostic marker for diseases in tissues comprising the protein

D, according to claim 35 which comprises using the antibody against the protein according to claim 35.

43. (New) The method according to claim 44, wherein the marker is used for diagnosis of a cancer.

Rewrite claims 11-15, 20, 22-27, 32 and 33 in amended form as follows (attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached version is captioned "Version with Markings to Show Changes Made"):

11. (Amended) A vector comprising the nucleotide sequence according to claim 36.

12. (Amended) Transformed cells having the nucleotide sequence according to claim 36.

D² 13. (Amended) A process for producing a protein which comprises culturing cells transformed with the nucleotide sequence (aa), (bb), (cc), (mm) or (nn) of claim 36, and collecting hBSSP5 produced.

14. (Amended) A process for producing a protein which comprises culturing cells transformed with the nucleotide sequence (dd), (ee), (ff), (gg), (hh), (ii), (jj), (kk), (ll), (oo) or (pp) of claim 36, and collecting mBSSP5 produced.

①² 15. (Amended) The process according to claim 13, wherein the cells are *E. coli* cells, animal cells or insect cells.

①³ 20. (Amended) An antibody against the protein according to claim 35 or a fragment thereof.

①³ 22. (Amended) A process for producing a monoclonal antibody against the protein according to claim 35 or a fragment thereof which comprises administering the protein according to claim 35 or a fragment thereof to a warm-blooded animal other than a human being, selecting the animal whose antibody titer is recognized, collecting its spleen or lymph node, fusing the antibody producing cells contained therein with myeloma cells to prepare a monoclonal antibody producing hybridoma.

23. (Amended) A method for determining the protein according to claim 35 or a fragment thereof in a specimen which is based on immunological binding of an antibody against the protein or a fragment thereof to the protein or a fragment thereof.

24. (Amended) A method for determining hBSSP5 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against the

protein (a) or (b) of claim 35 or a modified derivative thereof or a fragment thereof and a labeled antibody with hBSSP5 or a fragment thereof in the specimen to detect a sandwich complex produced.

0³ 25. (Amended) A method for determining hBSSP5 or a fragment thereof in a specimen which comprises reacting a monoclonal antibody or a polyclonal antibody against the protein (a) or (b) of claim 35 or a modified derivative thereof or a fragment thereof with labeled hBSSP5 and hBSSP5 or a fragment thereof in the specimen competitively to detect an amount of hBSSP5 or a fragment thereof in the specimen based on an amount of the labeled hBSSP5 reacted with the antibody.

26. The method according to claim 23, wherein the specimen is a body fluid.

27. (Amended) A diagnostic marker for diseases in tissues comprising the protein according to claim 35.

0⁴ 32. (Amended) A method for detecting pancreatitis which comprises measuring concentration of the protein according to claim 35 in blood or urine.